

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

July 6, 2004

Serial No. 10/648,817  
Applicant: Richard A. Enos  
Filed: 08/26/2003  
Title: **QUICK-RELEASE FASTENER FOR RELEASABLY  
ATTACHING LACROSSE STICK HEAD TO SHAFT**  
Art Unit: 3711  
Examiner: Michael S. Chambers  
Confirmation Number: 4560  
Attorney Docket No.: ENO-1CIP

Mail Stop Non-Fee Amendment  
Commissioner for Patents  
Alexandria, VA 22313-1450

**DECLARATION UNDER 37 CFR § 1.132**

HONORABLE COMMISSIONER OF  
PATENTS AND TRADEMARKS  
Washington, D.C. 20231

In response to the Office Action dated March 4, 2004, I, Richard A. Enos, do hereby declare and say as follows:

1. I have extensive experience in both playing and coaching the sport of lacrosse. I have played the game of lacrosse since 1975 (to present) and have coached the game of lacrosse for the past five years, since 1999.
2. I am constantly around the game of lacrosse (box and field). I am currently employed at Hobart College, where lacrosse is a very important part of the school's tradition.
3. Through my years of research and professional activities in the sport of lacrosse, I am familiar with the skills of those working in the field from at least 1999 to the present. In carrying out my current professional activities, I keep up to date on the technical literature and maintain contact with other experts in the field.
4. I am the sole inventor of the invention of claims 1-22 in the present patent application, Ser. No. 10/648,817.

5. I have read and understood the above referenced patent application, including the specification, claims and the relevant prior art cited by the Examiner in this case in support of the anticipation and obviousness rejections of the claims. Based on my analysis of the contents of the aforementioned documents, I have formulated certain opinions regarding the issues of the alleged anticipation and obviousness of the claims.
6. The standard I used for anticipation was whether a single prior art reference discloses each and every element or limitation of the claim.
7. The standard I used for obviousness was whether the differences between the subject matter sought to be patented and the prior art are such that the claimed subject matter as a whole would have been obvious, at the time the invention was made, to a person having ordinary skill in the art of genetic engineering of plants, and whether the teaching or suggestion is accompanied by an expectation of successfully making the claimed subject matter.
8. A person of ordinary skill in the art would have at least four years coaching experience and several years experience playing the game of lacrosse.

**CRAIN DOES NOT ANTICIPATE CLAIMS 1, 3, 6, 8 and 10**

9. Claims 1, 3, 6, 8 and 10 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by Crain (US 4,385,849). I strongly disagree with the Examiner's conclusion that the claims are anticipated, as explained in further detail below.
10. The invention of independent claims 1, 8 and 15 comprises a fastener that is a removable unitary assembly, which is quickly and easily installed or removed as a one-piece (*i.e.*, "unitary") assembly. Crain does not disclose a fastener that is a removable unitary assembly.
11. Rather, Crain discloses an extensible and retractable rod, comprising an outer tubular section and an inner section telescopically received in the outer section for extension and retraction relative thereto. The inner section has a stop at one end thereof engageable with the second shoulder of the outer section for limiting extension of the two sections relative to one another. The inner section may be releasably locked in an extended position relative to the outer section, by a detent pin 27 (constituting detent means) mounted in a diametrical bore 29 in plug 15, which is affixed at one end of the inner tubular section.
12. Thus, the locking mechanism of Crain clearly is not a removable unitary assembly that is easily installed or removed as a one-piece unit, rather, it is part of an internal plug, which is

integral with and affixed inside the inner section of tubing. Indeed, the plug is affixed in place and entirely inaccessible, since it is located inside the end of the inner tube section, thus it is not removable.

13. Therefore, Crain does not anticipate claims 1 ,8 and 15, because Crain does not disclose a fastener that is a removable unitary assembly.

#### **CRAIN DOES NOT TEACH CLAIMS 4, 5, 11 and 12**

14. Claims 4, 5, 11 and 12 stand rejected under 35 U.S.C. § 103 (a) as being obvious over Crain (US 4,385,849). I strongly disagree with the Examiner's conclusion that the claims are obvious, as explained in further detail below.
15. As noted above in respect to the section 102 rejection, Crain does not teach or suggest a fastener that is a removable unitary assembly, which is quickly and easily installed or removed as a one-piece (*i.e.*, "unitary") assembly.
16. There is no teaching or suggestion in the prior art to modify Crain as the Examiner suggests, and no evidence that one of ordinary skill in the art would have a reasonable expectation of success in making the suggested modification. Indeed, one in the art would not have a reasonable expectation of success in modifying Crain, as suggested by the Examiner. This is true because I, in fact, tried just that and it simply does not work.

#### **LONG-FELT, UNSOLVED NEED**

17. The need for this type of fastener is well known in the field and no lacrosse company has come up with a solution for this problem (that is why I came up with my invention).
18. The problem is that the screw that holds the lacrosse head on the lacrosse shaft does not stay in and becomes loose, then either the screw gets lost or the lacrosse head falls off. Then you have to either have to find and put in a bigger screw or use tape to tapc on your lacrosse head to your lacrosse shaft. I felt that there was a better way to solve this problem, and this is why I created my invention
19. The quick release fastener saves time off the field to change your lacrosse head from your lacrosse shaft, is safe, makes break-down for traveling easier, and thus is a product that has been needed for many years.

20. I created my invention because of the need not to carry a screwdriver and a bag of screws and tape to keep the lacrosse head attached to the lacrosse shaft. I realized the need for my invention when I was at games and practices, and the lacrosse heads would come off of the lacrosse shafts. The invention makes it easy to change and replace a lacrosse head from the lacrosse shaft without tools. You can break a lacrosse head, while playing the game of lacrosse, come to the sidelines and change your broken lacrosse head with a new lacrosse head, and be right back in the game.
21. The players that have tested the invention like the ease of use and how it holds the lacrosse head on the lacrosse shaft. With players having so many different types of lacrosse shafts and heads, they change their heads because of the weather, playing conditions or for other reasons, such as whether playing on natural grass or artificial turf. It was also praised for the ease of break-down for travel.

#### COMMERCIAL SUCCESS AND LICENSING

22. Although still relatively new to the market, my invention has already enjoyed substantial commercial success. I began manufacturing and distributing an embodiment of the invention approximately one year ago, and have since received substantial positive feedback, indicating a vast market for the product. However, I have not yet sold the product, for fear that prior sales might discourage potential licensees from licensing the invention.
23. I am currently negotiating a possible licensing arrangement with the manufacturers of multiple well-known popular brands of lacrosse sticks and related equipment, thereby further indicating the commercial success of the invention. Everyone that either uses it or sees it or I talk to about it seems to think that it is a great invention that has the potential to fill the long-felt, unsolved need in the art for this type of fastener.
24. I have had many meetings with various manufacturers of lacrosse equipment, including Brine, DeBEER, Cascade, and STX. On February 27, 2004, Dale Kohler of STX asked me to send a licensing proposal for discussion. I also recently (June 2004) made contact with the Warrior lacrosse company, which also is interested in a possible licensing arrangement.

#### CRITICALITY

25. The quick release fastener of my invention must be made to withstand the checking and severe impact from the ground and still keep the lacrosse head attached to the lacrosse shaft.

26. Through many hours of trial and error and many hours of building and failing also through many hours research and development. In my research I worked with many different types of materials, I built and rebuilt many different variations of the first quick release to the final product. It took me 6 months of trial and error to get the quick release to work.
27. I tested virtually every known fastening mechanism for suitability in addressing the problem of quickly and easily exchanging the head and/or shaft of a modern lacrosse stick. More particularly, I tested numerous fasteners of the type disclosed by Crain, however, none proved sufficient. For example, I determined that the mechanism commonly found in swimming pool vacuum cleaner shafts is unsuitable for fastening a lacrosse stick head to the shaft, because the pool tool cannot withstand the pounding of the game of lacrosse.
28. Similarly, I determined that a fastener mechanism, of the type commonly employed on walkers for people with disabilities, could not be fitted for lacrosse stick shafts and heads, and further would not stay in place in the shaft and would easily fall out. I also tested screen parts (*i.e.*, the pins and springs that hold a friction screen in a window) and blocks of plastic, but this mechanism also failed.
29. Indeed, the first prototype of my invention, upon placing it in a lacrosse shaft for testing, failed and fell apart after several games.
30. Through trial and error had to find the right type of pin. At first I used a plastic pin, but determined that the plastic pin wears rapidly with use through the lacrosse shaft. I then tried a steel pin, but through testing, I determined that the steel pin would rust, because the game of lacrosse is played in all types of weather. Finally, I arrived at a hardened brass pin, which is suitable in all types of weather, and can be manufactured to the desired shape.
31. The next problem was find the right spring and making sure that the tension of the spring was enough to hold the lacrosse head on the lacrosse shaft but there was not so much tension that you could not use the quick release with ease. This took much trial and error.
32. Next I worked on the right plastic that had to be used that would not only hold up for the amount of time that the quick release would be used, but also it had to withstand the checking and the force that it would get from hitting the ground and hold the lacrosse head on the lacrosse shaft. I then went to a press mold application to manufacture the product, which makes it possible to mill the fasteners to within one thousand of an inch, which is very important for quality control.

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Jul. 12 2004 05:18AM P1

**SKEPTICISM OF EXPERTS**

33. I have met with many experts in the field of lacrosse, and many of them have expressed skepticism, including Bill Brine, President of Cascade, Inc.

**COPYING BY OTHERS**

34. I am not aware of any similar product on the market, however, I did notice that STX recently as begun manufacturing its lacrosse stick heads for use with my invention. More particularly, the new STX (fuse) head mold, where the screw that attaches to the lacrosse shaft, is made the size of one of the quick release fastener prototypes that I have been distributing (at 7/32 inch). While not exactly copying, this is the first lacrosse product that I have seen on the market that seems to be getting ready to take advantage of my invention.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: 7/12/04By: Richard A. Enos

Richard A. Enos

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